



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 09/351,420 | 07/09/1999 | BRIAN VON HERZEN PH.D | | 9695 |

26362 7590 07/12/2005

LOUIS J. HOFFMAN, P.C.
14614 NORTH KIERLAND BOULEVARD, SUITE 300
SCOTTSDALE, AZ 85254

EXAMINER

NGUYEN, KIMNHUNG T

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2677

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/351,420

Applicant(s)

VON HERZEN PH.D ET AL.

Examiner

Kimnhung Nguyen

Art Unit

2677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 7/4/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 26-29 is/are allowed.
- 6) ☒ Claim(s) 1-25 and 30-51 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Application has been examined. The claims 1-51 are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5-9, 11, 16-21, 25, 30, 34-35 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow (US 4,637,148) in view of Albert et al. (US 6,118,426).

Regarding claims 1, 16, 25, 30, 35 and 49, Barlow discloses in figures 1-3, an illuminated wearable article comprising a regular two-dimensional (see case 12, see fig. 1); a graphic controller physically fastened coupled electrically connected to the case (see figs 3-4); a power source (32) physically fastened and electrically coupled to the graphics controller; and an fastener physically fastened (18) coupled to the back side and structure to allow attachment to a human clothing (see col. 6, lines 61-63). However, Barlow does not disclose an array of pixel display element having a front light-emitting side and an opposing back side. Albert et al. discloses in figs. 8A-8D a printed display having matrix array of pixel display element (see col. 16, lines 46-67) and may have a front light-emitting side and an opposing back side. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of a printed display having matrix array of pixel display element as taught

by Albert et al. into the system of Barlow because this would use a matrix of two terminal devices and control the tiles.

Regarding claim 5, Barlow does not disclose a common substrate to which the elements are mounted. Albert et al. discloses a common substrate to which the elements are mounted as discussed above.

Regarding claim 6, Barlow discloses further the substrate is a printed circuit board (see fig. 1).

Regarding claims 7-9, Barlow discloses further the fastener has two position, open and closed (see on and off of switch 20, see col. 1, lines 61-67), and obvious is a safe pin, and the fasten is configured so that the user cannot remove it from the substrate in either of the two positions (see col. 10, lines 47-49).

Regarding claim 11, Barlow discloses further the graphics controller is control circuit. However, Barlow does not disclose a control circuit configured by a computer program to display a user-selected sequence of patterns on the array. Albert et al. discloses a control circuit configured by a computer program to display a user-selected sequence of patterns on the array (see 6A, see col. 14, lines 28-40).

Regarding claims 16, 21 and 34, Barlow discloses further the substrate is a printed circuit board (22, fig. 1); the graphics controller is a control circuit (fig. 4). Furthermore, Barlow discloses the illuminated wearable comprising graphics controller and couplings that conduct current between the power source and any resistor components (see figure 4). However, Barlow does not disclose a common substrate is mounted. Albert et al. discloses a common substrate is mounted (see matrix array as discussed above).

Regarding claims 17-20, la discloses that the programming connector comprises a light responsive transducer, and the pixel display elements are light-emitting diodes (see col. 16, lines 46-67 and col. 17, lines 1-3).

3. Claims 22, 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Janney (US patent 6,201,525).

Janney et al. discloses an illuminated wearable article (see figure 5, column 2, lines 31-34) comprising a means (display window 30) for displaying a message (see column 2, lines 43-65); means for driving (33, figure 3) the display means to repeatedly scroll (35) the user selected message across the display means (see column 2, lines 57-66); means for power the display means (51), the selection means (buttons 20, 22, 24, 26, 28), and the driving means (33); and means for attaching the display means (10, see figure 5, column 4, lines 40-44), and the driving means (33, figure 3), and the power means (12) as unit to clothing (see figure 5, column 4, lines 39-46).

Janney et al. discloses an illuminated wearable article (see figure 5, column 2, lines 31-34) comprising a means (display window 30) for displaying a message (see column 2, lines 43-65); means for driving (33, figure 3) the display means to repeatedly scroll (35) the user selected message across the display means (see column 2, lines 57-66); means for power the display means (51), the selection means (buttons 20, 22, 24, 26, 28), and the driving means (33); and means for attaching the display means (10, see figure 5, column 4, lines 40-44), and the driving means (33, figure 3), and the power means (12) as unit to clothing (12) (see figure 5, column 4, lines 39-46); and means (memory 41) for storing for selection an alphanumeric character set

Art Unit: 2677

(alphabet), means for selecting the message as a sequence of patterns (see column 2, lines 57-66); and members of an alphanumeric character set (alphabet).

4. Claims 2-4, 10, 12-15, 23, 31-33, 36-48 and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow (US patent 4,637,148) in view of Janney (US 6,201,525) and in view of Albert (US 6,118,426) and further in view of Ryan, Jr. et al. (US patent 6,028,597).

Barlow and Albert and Janney disclose an illuminated wearable article comprising a regular two-dimensional array of pixel display elements as discussed above. However, they do not disclose the array has a width between 1 and 5, or 1.1 and 2.0, and approximately 1.5 times the character pitch; and the control circuit is programmed to select members of an alphanumeric character set (alphabet); and the brightness of each pixel is controlled by pulse-width modulation; and the article having a volume of less than 20 milliliters and the case is shaped like a rectangular prism, and two buttons supported by the case and electrically coupled to the graphics controller.

Regarding the claims 2-4, 23, 31-33 and 50-51, it would have been obvious to the system of Barlow to have the arrays has a width between 1 and 5, or 1.1 and 2.0, and approximately 1.5 times the character pitch, and the article having a volume of less than 20 milliliters and the case is shaped like a rectangular prism as claimed since such a modification would have involved a mere change in the range or shape of the system. A change in range or shape is generally recognized as being within the level of ordinary skill in the art.

See In re Rose, 105 USPQ 237 (CCPA 1995) and

In re Reven, 156 USPQ 679 (CCPA 1968).

5. Regarding claims 10,12-15 and 36-48, Janney discloses the control circuit is programmed to select of members of an alphanumeric (letters of alphabet) (see column 3, lines 29-32), and an inherent wherein the control circuit has a non-volatile store for the user-selected sequence of the pattern, Janney also discloses in figure 1 the two buttons (20, 22, 24, 26, 28) through the table and electrically coupled to the graphics controller (see column 3, lines 44-50). Ryan discloses a brightness of each pixel display element and pulse width modulated (see abstract), and two buttons supported by the case and electrically coupled to the graphics controller.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teaching of Janney and Ryan into the system of Barlow because this would allow the user to scroll backward through the table and enter a chosen character at a display portion, and animating an image of the character responsive to the characteristics (see abstract).

Allowable Subject Matter

6. Claims 26-29 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The present invention comprises a method of programming a message being scrolled on the display comprising a sequence of pattern or characters into a wearable ornamental comprising a activating by the buttons. The closest prior art, Barlow (US 4,637,148), Albert et al. (US 6,118,426) and Janney (6,201,525) shows a similar system which also disclose a moving alphanumeric messages are programmed by manipulation of five buttons related to the wearable ornamental display. However, they fails to teach the steps of a activating a third button

Art Unit: 2677

combination comprised of clicking at least one of the buttons, while in the edit mode to toggle from the edit mode to the run mode, thereby causing the replacement of the first character by the first replacement character in the scrolled message being display as claim 26.

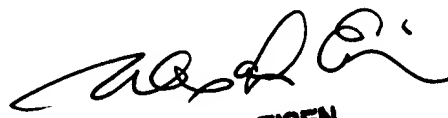
Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen
July 5, 2005


ALEXANDER EISEN
PRIMARY EXAMINER